FIGURE 1

Amino acid sequence for full-length human wild type DPPIV [SEQ. ID No. 1]
(Residues ~~51-778~~ 39-766 are underlined)

[[---------- --]]MKTPWKVL[[ ]]LG LLGAAALV[[ ]]TI ITVPVVLL[[ ]]NK
GTDDATAD[[ ]]SR KTYTLTDY[[ ]]LK NTYRLKLY[[ ]]SL 60
RWISDHEY[[ ]]LY KQENNILV[[ ]]FN AEYGNSSV[[ ]]FL ENSTFDEF[[ ]]GH
SINDYSIS[[ ]]PD GQFILLEY[[ ]]NY 120
VKQWRHSY[[ ]]TA SYDIYDLN[[ ]]KR QLITEERI[[ ]]PN NTQWVTWS[[ ]]PV
GHKLAYVW[[ ]]NN DIYVKIEP[[ ]]NL 180
PSYRITWT[[ ]]GK EDIIYNGI[[ ]]TD WVYEEEVF[[ ]]SA YSALWWSP[[ ]]NG
TFLAYAQF[[ ]]ND TEVPLIEY[[ ]]SF 240
YSDESLQY[[ ]]PK TVRVPYPK[[ ]]AG AVNPTVKF[[ ]]FV VNTDSLSS[[ ]]VT
NATSIQIT[[ ]]AP ASMLIGDH[[ ]]YL 300
CDVTWATQ[[ ]]ER ISLQWLRR[[ ]]IQ NYSVMDIC[[ ]]DY DESSGRWN[[ ]]CL
VARQHIEM[[ ]]ST TGWVGRFR[[ ]]PS 360
EPHFTLDG[[ ]]NS FYKIISNE[[ ]]EG YRHICYFQ[[ ]]ID KKDCTFIT[[ ]]KG
TWEVIGIE[[ ]]AL TSDYLYYI[[ ]]SN 420
EYKGMPGG[[ ]]RN LYKIQLSD[[ ]]YT KVTCLSCE[[ ]]LN PERCQYYS[[ ]]VS
FSKEAKYY[[ ]]QL RCSGPGLP[[ ]]LY 480
TLHSSVND[[ ]]KG LRVLEDNS[[ ]]AL DKMLQNVQ[[ ]]MP SKKLDFII[[ ]]LN
ETKFWYQM[[ ]]IL PPHFDKSK[[ ]]KY 540
PLLLDVYA[[ ]]GP CSQKADTV[[ ]]FR LNWATYLA[[ ]]ST ENIIVASF[[ ]]DG
RGSGYQGD[[ ]]KI MHAINRRL[[ ]]GT 600
FEVEDQIE[[ ]]AA RQFSKMGF[[ ]]VD NKRIAIWG[[ ]]WS YGGYVTSM[[ ]]VL
GSGSGVFK[[ ]]CG IAVAPVSR[[ ]]WE 660
YYDSVYTE[[ ]]RY MGLPTPED[[ ]]NL DHYRNSTV[[ ]]MS RAENFKQV[[ ]]EY
LLIHGTAD[[ ]]DN VHFQQSAQ[[ ]]IS 720
KALVDVGV[[ ]]DF QAMWYTDE[[ ]]DH GIASSTAH[[ ]]QH IYTHMSHF[[ ]]IK
QCFSLP ~~778~~776

Amino acid sequence for residues ~~51-778~~ 39-766 of DPPIV with a N-terminal 6x-histidine tag [SEQ. ID No. 3]
(part of a gp67 signal sequence and a 6x-histidine tag is underlined)

ADPGGSHHHH HHSRKTYTLT DYLKNTYRLK LYSLRWISDH EYLYKQENNI LVFNAEYGNS 60
SVFLENSTFD EFGHSINDYS ISPDGQFILL EYNYVKQWRH SYTASYDIYD LNKRQLITEE 120
RIPNNTQWVT WSPVGHKLAY VWNNDIYVKI EPNLPSYRIT WTGKEDIIYN GITDWVYEEE 180
VFSAYSALWW SPNGTFLAYA QFNDTEVPLI EYSFYSDESL QYPKTVRVPY PKAGAVNPTV 240
KFFVVNTDSL SSVTNATSIQ ITAPASMLIG DHYLCDVTWA TQERISLQWL RRIQNYSVMD 300
ICDYDESSGR WNCLVARQHI EMSTTGWVGR FRPSEPHFTL DGNSFYKIIS NEEGYRHICY 360
FQIDKKDCTF ITKGTWEVIG IEALTSDYLY YISNEYKGMP GGRNLYKIQL SDYTKVTCLS 420
CELNPERCQY YSVSFSKEAK YYQLRCSGPG LPLYTLHSSV NDKGLRVLED NSALDKMLQN 480
VQMPSKKLDF IILNETKFWY QMILPPHFDK SKKYPLLLDV YAGPCSQKAD TVFRLNWATY 540
LASTENIIVA SFDGRGSGYQ GDKIMHAINR RLGTFEVEDQ IEAARQFSKM GFVDNKRIAI 600
WGWSYGGYVT SMVLGSGSGV FKCGIAVAPV SRWEYYDSVY TERYMGLPTP EDNLDHYRNS 660
TVMSRAENFK QVEYLLIHGT ADDNVHFQQS AQISKALVDV GVDFQAMWYT DEDHGIASST 720
AHQHIYTHMS HFIKQCFSLP 740

FIGURE 1 (Cont.)

Human cDNA sequence encoding residues ~~51-778~~ 39-766 of DPPIV [SEQ. ID No. 2]

```
AGTCGCAAAA CTTACACTCT AACTGATTAC TTAAAAAATA CTTATAGACT GAAGTTATAC    60
TCCTTAAGAT GGATTTCAGA TCATGAATAT CTCTACAAAC AAGAAAATAA TATCTTGGTA   120
TTCAATGCTG AATATGGAAA CAGCTCAGTT TTCTTGGAGA ACAGTACATT TGATGAGTTT   180
GGACATTCTA TCAATGATTA TTCAATATCT CCTGATGGGC AGTTTATTCT CTTAGAATAC   240
AACTACGTGA AGCAATGGAG GCATTCCTAC ACAGCTTCAT ATGACATTTA TGATTTAAAT   300
AAAAGGCAGC TGATTACAGA AGAGAGGATT CCAAACAACA CACAGTGGGT CACATGGTCA   360
CCAGTGGGTC ATAAATTGGC ATATGTTTGG AACAATGACA TTTATGTTAA AATTGAACCA   420
AATTTACCAA GTTACAGAAT CACATGGACG GGGAAAGAAG ATATAATATA TAATGGAATA   480
ACTGACTGGG TTTATGAAGA GGAAGTCTTC AGTGCCTACT CTGCTCTGTG GTGGTCTCCA   540
AACGGCACTT TTTTAGCATA TGCCCAATTT AACGACACAG AAGTCCCACT TATTGAATAC   600
TCCTTCTACT CTGATGAGTC ACTGCAGTAC CCAAAGACTG TACGGGTTCC ATATCCAAAG   660
GCAGGAGCTG TGAATCCAAC TGTAAAGTTC TTTGTTGTAA ATACAGACTC TCTCAGCTCA   720
GTCACCAATG CAACTTCCAT ACAAATCACT GCTCCTGCTT CTATGTTGAT AGGGGATCAC   780
TACTTGTGTG ATGTGACATG GGCAACACAA GAAAGAATTT CTTTGCAGTG GCTCAGGAGG   840
ATTCAGAACT ATTCGGTCAT GGATATTTGT GACTATGATG AATCCAGTGG AAGATGGAAC   900
TGCTTAGTGG CACGGCAACA CATTGAAATG AGTACTACTG GCTGGGTTGG AAGATTTAGG   960
CCTTCAGAAC CTCATTTTAC CCTTGATGGT AATAGCTTCT ACAAGATCAT CAGCAATGAA  1020
GAAGGTTACA GACACATTTG CTATTTCCAA ATAGATAAAA AAGACTGCAC ATTTATTACA  1080
AAAGGCACCT GGGAAGTCAT CGGGATAGAA GCTCTAACCA GTGATTATCT ATACTACATT  1140
AGTAATGAAT ATAAAGGAAT GCCAGGAGGA AGGAATCTTT ATAAAATCCA ACTTATTGAC  1200
TATACAAAAG TGACATGCCT CAGTTGTGAG CTGAATCCGG AAAGGTGTCA GTACTATTCT  1260
GTGTCATTCA GTAAAGAGGC GAAGTATTAT CAGCTGAGAT GTTCCGGTCC TGGTCTGCCC  1320
CTCTATACTC TACACAGCAG CGTGAATGAT AAAGGGCTGA GAGTCCTGGA AGACAATTCA  1380
GCTTTGGATA AAATGCTGCA GAATGTCCAG ATGCCCTCCA AAAAACTGGA CTTCATTATT  1440
TTGAATGAAA CAAAATTTTG GTATCAGATG ATCTTGCCTC CTCATTTTGA TAAATCCAAG  1500
AAATATCCTC TACTATTAGA TGTGTATGCA GGCCCATGTA GTCAAAAAGC AGACACTGTC  1560
TTCAGACTGA ACTGGGCCAC TTACCTTGCA AGCACAGAAA ACATTATAGT AGCTAGCTTT  1620
GATGGCAGAG GAAGTGGTTA CCAAGGAGAT AAGATCATGC ATGCAATCAA CAGAAGACTG  1680
GGAACATTTG AAGTTGAAGA TCAAATTGAA GCAGCCAGAC AATTTTCAAA AATGGGATTT  1740
GTGGACAACA AACGAATTGC AATTTGGGGC TGGTCATATG GAGGGTACGT AACCTCAATG  1800
GTCCTGGGAT CGGGAAGTGG CGTGTTCAAG TGTGGAATAG CCGTGGCGCC TGTATCCCGG  1860
TGGGAGTACT ATGACTCAGT GTACACAGAA CGTTACATGG GTCTCCCAAC TCCAGAAGAC  1920
AACCTTGACC ATTACAGAAA TTCAACAGTC ATGAGCAGAG CTGAAAATTT TAAACAAGTT  1980
GAGTACCTCC TTATTCATGG AACAGCAGAT GATAACGTTC ACTTTCAGCA GTCAGCTCAG  2040
ATCTCCAAAG CCCTGGTCGA TGTTGGAGTG GATTTCCAGG CAATGTGGTA TACTGATGAA  2100
GACCATGGAA TAGCTAGCAG CACAGCACAC CAACATATAT ATACCCACAT GAGCCACTTC  2160
ATAAAACAAT GTTTCTCTTT ACCT                                         2184
```

FIGURE 1

Amino acid sequence for full-length human wild type DPPIV [SEQ. ID No. 1]

(Residues 39-766 are underlined)

```
MKTPWKVLLG LLGAAALVTI ITVPVVLLNK GTDDATADSR KTYTLTDYLK NTYRLKLYSL    60
RWISDHEYLY KQENNILVFN AEYGNSSVFL ENSTFDEFGH SINDYSISPD GQFILLEYNY   120
VKQWRHSYTA SYDIYDLNKR QLITEERIPN NTQWVTWSPV GHKLAYVWNN DIYVKIEPNL   180
PSYRITWTGK EDIIYNGITD WVYEEEVFSA YSALWWSPNG TFLAYAQFND TEVPLIEYSF   240
YSDESLQYPK TVRVPYPKAG AVNPTVKFFV VNTDSLSSVT NATSIQITAP ASMLIGDHYL   300
CDVTWATQER ISLQWLRRIQ NYSVMDICDY DESSGRWNCL VARQHIEMST TGWVGRFRPS   360
EPHFTLDGNS FYKIISNEEG YRHICYFQID KKDCTFITKG TWEVIGIEAL TSDYLYYISN   420
EYKGMPGGRN LYKIQLSDYT KVTCLSCELN PERCQYYSVS FSKEAKYYQL RCSGPGLPLY   480
TLHSSVNDKG LRVLEDNSAL DKMLQNVQMP SKKLDFIILN ETKFWYQMIL PPHFDKSKKY   540
PLLLDVYAGP CSQKADTVFR LNWATYLAST ENIIVASFDG RGSGYQGDKI MHAINRRLGT   600
FEVEDQIEAA RQFSKMGFVD NKRIAIWGWS YGGYVTSMVL GSGSGVFKCG IAVAPVSRWE   660
YYDSVYTERY MGLPTPEDNL DHYRNSTVMS RAENFKQVEY LLIHGTADDN VHFQQSAQIS   720
KALVDVGVDF QAMWYTDEDH GIASSTAHQH IYTHMSHFIK QCFSLP                  766
```

Amino acid sequence for residues 39-766 of DPPIV with a

N-terminal 6x-histidine tag [SEQ. ID No. 3]

(part of a gp67 signal sequence and a 6x-histidine tag is underlined)

```
ADPGGSHHHH HHSRKTYTLT DYLKNTYRLK LYSLRWISDH EYLYKQENNI LVFNAEYGNS    60
SVFLENSTFD EFGHSINDYS ISPDGQFILL EYNYVKQWRH SYTASYDIYD LNKRQLITEE   120
RIPNNTQWVT WSPVGHKLAY VWNNDIYVKI EPNLPSYRIT WTGKEDIIYN GITDWVYEEE   180
VFSAYSALWW SPNGTFLAYA QFNDTEVPLI EYSFYSDESL QYPKTVRVPY PKAGAVNPTV   240
KFFVVNTDSL SSVTNATSIQ ITAPASMLIG DHYLCDVTWA TQERISLQWL RRIQNYSVMD   300
ICDYDESSGR WNCLVARQHI EMSTTGWVGR FRPSEPHFTL DGNSFYKIIS NEEGYRHICY   360
FQIDKKDCTF ITKGTWEVIG IEALTSDYLY YISNEYKGMP GGRNLYKIQL SDYTKVTCLS   420
CELNPERCQY YSVSFSKEAK YYQLRCSGPG LPLYTLHSSV NDKGLRVLED NSALDKMLQN   480
VQMPSKKLDF IILNETKFWY QMILPPHFDK SKKYPLLLDV YAGPCSQKAD TVFRLNWATY   540
LASTENIIVA SFDGRGSGYQ GDKIMHAINR RLGTFEVEDQ IEAARQFSKM GFVDNKRIAI   600
WGWSYGGYVT SMVLGSGSGV FKCGIAVAPV SRWEYYDSVY TERYMGLPTP EDNLDHYRNS   660
TVMSRAENFK QVEYLLIHGT ADDNVHFQQS AQISKALVDV GVDFQAMWYT DEDHGIASST   720
AHQHIYTHMS HFIKQCFSLP                                               740
```

FIGURE 1 (Cont.)

Human cDNA sequence encoding residues 39-766 of DPPIV [SEQ. ID No. 2]

```
AGTCGCAAAA CTTACACTCT AACTGATTAC TTAAAAAATA CTTATAGACT GAAGTTATAC    60
TCCTTAAGAT GGATTTCAGA TCATGAATAT CTCTACAAAC AAGAAAATAA TATCTTGGTA   120
TTCAATGCTG AATATGGAAA CAGCTCAGTT TTCTTGGAGA ACAGTACATT TGATGAGTTT   180
GGACATTCTA TCAATGATTA TTCAATATCT CCTGATGGGC AGTTTATTCT CTTAGAATAC   240
AACTACGTGA AGCAATGGAG GCATTCCTAC ACAGCTTCAT ATGACATTTA TGATTTAAAT   300
AAAAGGCAGC TGATTACAGA AGAGAGGATT CCAAACAACA CACAGTGGGT CACATGGTCA   360
CCAGTGGGTC ATAAATTGGC ATATGTTTGG AACAATGACA TTTATGTTAA AATTGAACCA   420
AATTTACCAA GTTACAGAAT CACATGGACG GGGAAAGAAG ATATAATATA TAATGGAATA   480
ACTGACTGGG TTTATGAAGA GGAAGTCTTC AGTGCCTACT CTGCTCTGTG GTGGTCTCCA   540
AACGGCACTT TTTTAGCATA TGCCCAATTT AACGACACAG AAGTCCCACT TATTGAATAC   600
TCCTTCTACT CTGATGAGTC ACTGCAGTAC CCAAAGACTG TACGGGTTCC ATATCCAAAG   660
GCAGGAGCTG TGAATCCAAC TGTAAAGTTC TTTGTTGTAA ATACAGACTC TCTCAGCTCA   720
GTCACCAATG CAACTTCCAT ACAAATCACT GCTCCTGCTT CTATGTTGAT AGGGGATCAC   780
TACTTGTGTG ATGTGACATG GGCAACACAA GAAAGAATTT CTTTGCAGTG GCTCAGGAGG   840
ATTCAGAACT ATTCGGTCAT GGATATTTGT GACTATGATG AATCCAGTGG AAGATGGAAC   900
TGCTTAGTGG CACGGCAACA CATTGAAATG AGTACTACTG GCTGGGTTGG AAGATTTAGG   960
CCTTCAGAAC CTCATTTTAC CCTTGATGGT AATAGCTTCT ACAAGATCAT CAGCAATGAA  1020
GAAGGTTACA GACACATTTG CTATTTCCAA ATAGATAAAA AAGACTGCAC ATTTATTACA  1080
AAAGGCACCT GGGAAGTCAT CGGGATAGAA GCTCTAACCA GTGATTATCT ATACTACATT  1140
AGTAATGAAT ATAAAGGAAT GCCAGGAGGA AGGAATCTTT ATAAAATCCA ACTTATTGAC  1200
TATACAAAAG TGACATGCCT CAGTTGTGAG CTGAATCCGG AAAGGTGTCA GTACTATTCT  1260
GTGTCATTCA GTAAAGAGGC GAAGTATTAT CAGCTGAGAT GTTCCGGTCC TGGTCTGCCC  1320
CTCTATACTC TACACAGCAG CGTGAATGAT AAAGGGCTGA GAGTCCTGGA AGACAATTCA  1380
GCTTTGGATA AAATGCTGCA GAATGTCCAG ATGCCCTCCA AAAAACTGGA CTTCATTATT  1440
TTGAATGAAA CAAAATTTTG GTATCAGATG ATCTTGCCTC CTCATTTTGA TAAATCCAAG  1500
AAATATCCTC TACTATTAGA TGTGTATGCA GGCCCATGTA GTCAAAAAGC AGACACTGTC  1560
TTCAGACTGA ACTGGGCCAC TTACCTTGCA AGCACAGAAA ACATTATAGT AGCTAGCTTT  1620
GATGGCAGAG GAAGTGGTTA CCAAGGAGAT AAGATCATGC ATGCAATCAA CAGAAGACTG  1680
GGAACATTTG AAGTTGAAGA TCAAATTGAA GCAGCCAGAC AATTTTCAAA AATGGGATTT  1740
GTGGACAACA AACGAATTGC AATTTGGGGC TGGTCATATG GAGGGTACGT AACCTCAATG  1800
GTCCTGGGAT CGGGAAGTGG CGTGTTCAAG TGTGGAATAG CCGTGGCGCC TGTATCCCGG  1860
TGGGAGTACT ATGACTCAGT GTACACAGAA CGTTACATGG GTCTCCCAAC TCCAGAAGAC  1920
AACCTTGACC ATTACAGAAA TTCAACAGTC ATGAGCAGAG CTGAAAATTT TAAACAAGTT  1980
GAGTACCTCC TTATTCATGG AACAGCAGAT GATAACGTTC ACTTTCAGCA GTCAGCTCAG  2040
ATCTCCAAAG CCCTGGTCGA TGTTGGAGTG GATTTCCAGG CAATGTGGTA TACTGATGAA  2100
GACCATGGAA TAGCTAGCAG CACAGCACAC CAACATATAT ATACCCACAT GAGCCACTTC  2160
ATAAAACAAT GTTTCTCTTT ACCT                                         2184
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